

This genus is represented by a single species, and is distinguished from *Liopropoma* chiefly by the modification of the dorsal fin, but differs also by other less important peculiarities. The name of *Chorististium* has been bestowed on it in allusion to the separation of the second dorsal from the first,* on account of the atrophy of the antecedent spines of the former which occur in *Liopropoma*.

Genus SINIPERCA Gill.

Perca Basilewski, Nouveaux Memoires de la Société Impériale des Naturalistes de Moscou, Tome x., p. 217. 1855.

Non *Perca*, Linn.

Body oblong and compressed, covered with small scales. Lateral line little arched in front. Head mostly scaleless, oblong, with the profile slightly incurved to the eyes, and with the snout conic and slightly convex before eyes. Eyes small, entirely in the anterior half of the head. Mouth rather large, the supramaxillary bones continued under or behind the eyes. Lower jaw prominent. Teeth villiform on the jaws, vomer and palatine bones. Preoperculum serrated behind, beneath with three or four spines or lobes. Operculum terminating in a spine. Branchiostegal rays seven. Dorsal fins connected at base; the first arched, with twelve spines; the second short and quadrate. Anal with three spines, the second of which is short or moderate; the soft part corresponding to the second dorsal. Caudal entire. Pectoral fins rounded behind.

Type. *Siniperca chua-tsi*, Gill.

Syn. *Perca chua-tsi*, *Basilewski*, op. cit., tome x., p. 218, tab. 1, fig. 1.

This is a very distinct and peculiar genus, its physiognomy recalling to mind the *Lates calcarifer* more than any other fish, but it widely differs from *Lates* in the development of the first dorsal fin, the almost or quite naked head, the small size of the scales on the trunk and the slight armature of the opercular bones. It is composed of only two known species, the *Perca chua-tsi* and *P. chuan-tsi* of Basilewski, both of which are inhabitants of the Chinese rivers. In allusion to this restriction of habitat to the Chinese Empire, the name of *Siniperca* may be given. Dr. Basilewski has very well formulated the characters of the genus, but he has unfortunately employed for it the name of *Perca*; the latter must of course be retained for that to which it was originally given, and it then becomes necessary to rename the Chinese fishes.

Note on the SCIÆNOIDS of California.

BY THEODORE GILL.

Dr. Ayres has recently described, in the "Proceedings of the California Academy of Natural Sciences," two new species of Sciænoids, for one of which he has framed a new genus, (*Seriphus*,) and the other has been referred to *Johnius*. Dr. Ayres has also expressed his belief in the close affinity of *Seriphus* and *Johnius*. On perusing his description, and after an examination of his outline figures, I am convinced that *Seriphus* is most closely allied to that as yet unnamed genus of which the *Ancylodon parvipinnis* of Cuvier and Valenciennes is the type, while the *Johnius nobilis* belongs to one nearly allied to the weak fishes (*Cynoscion*) of the Eastern American coast, and is congeneric with Cuvier's *Otolithus æquidens* of the Cape of Good Hope. The two species of California are consequently not only generically distinct, but they appear to me to represent two subfamilies, equally distinct from each other and from the Sciæninæ.†

* Χαριστός, separate and ἱστίον, sail.

† It may be here remarked that the genus *Camarina* of Ayres is not at all related to the Pomacentroids, but is synonymous with the genus *Girella* of Gray and Günther. Dr. Ayres has stated that the "genus, though resembling in general features some species of *Pomacentrus*, presents a new grouping of generic characters."

Five species of Sciænoids are now known as inhabitants of the western coast of the United States; they represent apparently three groups or subfamilies.

The SCIÆNINÆ or CORVININÆ are restricted to those species of the family having the normal or nearly the normal number ($\frac{10}{14}$) of vertebræ, that of the caudal being sometimes increased. The snout is more or less protuberant; and the lower jaws generally received within the upper. The lower pharyngeal bones are separated; the upper triple on each side.

Three of the Californian species belong to this group.

1. RHINOSCION SATURNUS Gill.
Amblodon saturnus Girard.
2. UMBRINA UNDULATUS Girard.
Menticirrhus undulatus Gill.
3. GENYONEMUS LINEATUS Gill.
Leiostomus lineatus Ayres.

The second species was formerly referred to *Menticirrhus*, but as I am now acquainted with a true *Umbina* from Lower California, I prefer to retain Girard's species in the latter genus. The description of Girard, although very unsatisfactory, rather tends to confirm the propriety of such restoration.

The following synopsis of the *Umbinæ* of Cuvier shows the principal distinctions of the several genera.

- I. Dorsal spines ten.
Head oblong and declivous above; caudal equal.....*Umbina*.
Head rather elongated; caudal unequally lobed; the upper
pointed, the lower convex.....*Menticirrhus*.
- II. Dorsal spines thirteen.
Head rather short and blunt*Cirrimens*.*

The second subfamily or group is that of the OTOLITHINÆ, which, I have discovered since the publication of the notice of the North American Sciænoids, is distinguished by the reversed proportions of the numbers of the vertebræ.† The body is fusiform, and the lower jaw is prominent or at least even with the upper.

To this belongs the following species:—

4. ATRACTOSCION NOBILIS Gill.
Johnius nobilis Ayres.

The following synopsis exhibits the characters of *Atractoscion* compared with the other genera of Otolithinæ.

- A. Height less than one-fourth of length. (Vertebræ
about $\frac{14}{10}$.).....OTOLITHINÆ.
- B. Teeth regularly attenuated and pointed.
Eyes very large, the diameter longer than the snout.

*The type of this genus is the *Umbina ophiocephalus* of Jenyns.

†By this character the Otolithinæ are distinguished from the LARIMINÆ, which has nearly the normal number and proportion of the vertebræ ($\frac{10-11}{15}$). Possibly *Odontoscion*, as Gunther supposes, may be most nearly allied to this group, but it appears more nearly connected to the Otolithinæ. The Lariminæ have, then, two genera very distinct from each other, and recognizable by the following characters:—
Second dorsal much longer than the first. (= 1. 24–30.) *L. breviceps* Cuv. Larimus.
Second dorsal as short or shorter than first. (= 1. 13.) *L. auritus* Cuv. Brachydeuterus.

- Teeth in external row large.....Odontoscion.*
 Eyes moderate, the diameter less than the snout.
 Teeth in 1—3 rows.
 Anal fin I.—II. 7—13.
 Canine teeth of lower jaw largeOtolithus.†
 Canine teeth in lower jaw obsolete.
 Pseudobranchiæ developed.....Cynoscion.‡
 Pseudobranchiæ obsoleteApseudobranchus.§
 Anal fin I. 15—16.....Archoscion.||
 Teeth cardiform or pluriserialAtractoscion.¶
 BB. Teeth above in front (2) and beneath on sides large and
 arrow-shaped.....Ancylodon.**

The third group is composed of two genera, and may be called ISOPISTHINÆ.
 The only species of the Californian is that named by Ayres.

5. SERIPHUS POLITUS Ayres.

The following are the characters of the group and genera:—

- A. Dorsal fins quite remote; second dorsal and anal subequal,
 oblong.....ISOPISTHINÆ.
 Scales small and cycloid. Canine teeth above in front and
 below on sides very large and lanceolate.....Isopisthus.
 Scales large, strongly ciliated. Teeth distinct, in one or
 two rows.....Seriphus.

The discovery of representatives of such rare types on that coast which has
 already furnished so remarkable a number of peculiar forms, is a discovery of
 much interest.

I have, in my treatise on the North American Scienoid genera, alluded to
 the external differences between the Corvininæ and Otolithinæ, but, unable to
 find other satisfactory characters, declined at that time to consider them as
 distinct subfamilies. It was after an examination of Dr. Günther's work that
 my attention was arrested by the coincidence between the proportions of the
 abdominal and caudal vertebræ and the external form, and I cannot but believe
 that the value that has been now given to the groups is merited by their im-
 portance. To Dr. Günther we are indebted for having first assigned to the
 family of Scienoids its true limits. He appears to have retained such, and
 such only, as are genuine members of the family. Some, as *Isopisthus* and
Seriphus, seem indeed to have some relation to the carangoid Scombroids, such
 as *Lactarius*, but the affinity is probably remote. The wide separation above
 proposed between *Isopisthus* and *Ancylodon* does not appear to be unnatural.

The resignation of R. E. Griffith as Librarian was read and accepted.

The following was read and adopted:

Resolved, That the Committee on the Library, in conjunction with
 the Librarian, be authorized to employ an assistant for one year, at a
 salary not to exceed twenty-five dollars per month.

The Auditors reported that they had examined the Treasurer's an-
 nual report and had found it correct.

*Type. *Corvina dentex* Cuv. et Val. †Type. *Otolithus ruber* Cuv. et Val.

‡*Otolithus regalis* Cuv.

§*Otolithus toe-roë* Cuv. et Val.

|| *Otolithus analis* Jenyns.

¶*Otolithus æquidens* Cuv. et Val.

***Ancylodon jaculidens* Cuv. et Val.